



# ATTITUDES TOWARDS ORGAN WAITLIST SYSTEM AMONG WAITLISTED TRANSPLANT PATIENTS, DONORS, AND NON-DONORS

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## ABSTRACT

The organ waitlist system plays a crucial role in determining the order of allocation for transplants among different groups of patients. However, public opinions and attitudes often question its fairness, transparency, and consistency, with concerns that the system may be prone to misuse or bias in distribution.

This study investigates the varied perspectives of three participant groups: transplant patients, donors, and non-donors. Through inquiries and a digital survey, the study analyzes perceptions of equity to identify microtrends across factors such as socioeconomic status, religion, and other potential influences on the waitlist decision-making process.

The findings highlight disparities in the system's transparency, gathered through voluntary and secure submissions. These insights are essential for building trust and open communication, not only to increase the donor pool and evaluate public awareness but also to address common misconceptions within communities. Ultimately, the study aims to explore how informed perspectives can help reduce systemic inequalities in the allocation of life-saving transplants.

**KEYWORDS:** Organ Donation, Waitlist System, Transplant Ethics, Public Attitudes, Donor Behavior, Healthcare Equity, Medical Urgency, Allocation Transparency

## INTRODUCTION

**Research Problem:** The global issue of organ shortage poses a significant challenge within the medical community, as there is a scarcity of willing donors who provide full consent and acknowledge the personal implications involved. Even with active efforts to spread awareness about the issue, many patients and bystanders continue to express criticisms, which are based on their personal experiences, thoughts, opinions, and the factors shaping their perceptions.

**Rationale:** The demand for organs continues to rise annually due to their proven effectiveness in treating organ failure. Over 100,000 patients from diverse backgrounds are currently waiting for transplants, and hospitals acknowledge that both supply shortages and the specific types of required organs influence allocation techniques.

This research aims to identify the different allocation methods and the economic and ethical factors that must be considered, such as medical urgency, utility, and compatibility. Furthermore, the study also compares attitudes among different groups of individuals - waitlisted transplant patients, living donors, and non-donors.

Patients often experience anxiety or negative emotions due to long wait times, which can also affect their families and mental health. In addition, recurring public concerns and questions highlight the need for clearer communication and trust in the system. Addressing these concerns not only enhances public

awareness but also contributes to a more transparent and participatory organ donation process.

**Aim of the Study:** This study aims to investigate different perspectives across various groups of individuals. It further attempts to compare their understanding of the organ waitlist in the context of common misconceptions and concerns. The study also examines the current prioritization practices within the waitlist system and identifies whether misconceptions are affecting donor participation or contributing to perceived transparency issues in the transplant system.

**Hypothesis:** This study hypothesizes that due to the long waitlist durations and the high number of untreated patients, public attitudes may vary across different age groups. For instance, younger individuals (ages 20–30) may be prioritized on the waitlist due to their higher expected survival rates. Because they are perceived to be more productive in the workforce, their perspectives may differ from those of middle-aged or elderly individuals. However, these priorities may also vary by region, with hospitals focusing on criteria such as severity of illness, medical urgency, and tissue compatibility.

## Research Background

Kidney failure is responsible for approximately 1.2 million deaths each year. In 2022 alone, around 157,000 organ transplants were performed globally. However, this number remains drastically insufficient when compared to the growing demand for organs and the number of patients waiting for life-

saving transplants. The disparity between supply and demand is large and is projected to worsen.

A lack of access and equity in organ transplantation affects many countries worldwide, though it is particularly severe in developing nations such as Myanmar, the Philippines, and other Southeast Asian countries, where rates of deceased organ donors are among the lowest. Yet, even developed nations like the USA, Germany, and Norway continue to face organ shortages. While countries have adopted various strategies, such as opt-in and opt-out donor systems and offering priority incentives to registered donors, their effectiveness varies widely. Each country uses different methods to determine transplant eligibility and allocation, raising important bioethical questions, especially considering that millions of patients die annually while still on the waitlist.

Several potential solutions have been proposed to address the organ shortage crisis. These include bioengineered organs, where new tissue is developed using existing scaffolds, and xenotransplantation, which involves transplanting living cells from animals into humans. However, these methods remain in early stages of development and present serious risks to human health, as they are still being tested and are not yet considered safe for widespread use.

Further compounding the issue, a report from the U.S. National Academies of Sciences, Engineering, and Medicine (n.d.) revealed that 1 in 5 kidneys from deceased donors in the U.S. are not used. The report also highlights significant inequities in the transplant system, pointing to a lack of coordination and systemic fairness. Additionally, biases in clinical algorithms—particularly those affecting race and disability status—create further disparities in organ allocation. Despite these critical flaws, the overarching mission of the transplant system remains the same: to save as many lives as possible. For this goal to be realized equitably, communities must be equipped with factual, transparent information so that they can actively participate in organ donation efforts and advocate for a more just system.

### Compilation of Sources

This topic has been previously explored in literature, covering various angles from the pros and cons of the organ waitlist system to country-specific strategies aimed at reducing mortality among those awaiting transplants. However, one critical and unresolved question persists: Why do donated organs consistently not meet demand?

To help answer this, the study relies on surveys and primary data. These tools may offer insight into the social and psychological factors that shape individual attitudes toward donation and transplantation. The implications of this research may enrich existing literature and contribute new perspectives to the ongoing global conversation on ethical and efficient organ allocation.

### METHODOLOGY

**Study Design:** This study employed a qualitative cross-sectional design to investigate attitudes toward organ waitlist systems

among waitlisted transplant patients, donors, and non-donors. The primary focus was to assess participants' socioeconomic status and background, including age, education, religion, etc. A secondary focus was to identify their perspectives on the allocation process within the waitlist system, such as how long they had been on the waitlist and the type of transplant they required. A survey-based approach was chosen to gather opinions and attitudes from a range of individuals. The responses were then stratified by age group, socioeconomic status, education level, etc., enabling comparative analysis.

**Participants:** Participants were recruited using a combination of convenience and purposive sampling techniques, based on their personal knowledge and understanding. Some participants were also recruited due to their medical backgrounds. The sample was divided into the following age groups:

1. 20–24
2. 25–34
3. 35–44
4. 44–60
5. 60 years and above

**Gender Distribution:** To explore potential gender-based differences in attitudes toward the organ waitlist system, gender distribution was analyzed. The survey was designed to collect participants' views on the allocation process, including:

**Data Collection:** Data collection occurred in a single phase and was conducted through one comprehensive questionnaire aimed at understanding the attitudes and perspectives of 150 individuals, both within and outside the waitlist system. Correlations were assessed across factors such as age group, religion, and education level. The survey was administered online via a secure platform (Google Forms) and distributed to diverse age groups with varying socioeconomic backgrounds to ensure accessibility, inclusivity, and a broad view of perceptions on equity, fairness, and allocation processes.

**Population and Study Setting:** This cross-sectional, single-center study enrolled some patients who were active on the transplant waitlist at an academic tertiary care hospital, along with their relatives and friends. Participants included those with direct or indirect experiences of the organ waitlist system. Many respondents answered based on personal relevance or familiarity with the issue. Additionally, the majority of participants came from educational settings, enabling them to make informed judgments.

**Methods:** The study investigates how individuals perceive the organ waitlist system based on their current knowledge. The survey was distributed across a wide demographic, including students, teenagers, and elderly individuals, who are statistically more prone to chronic illnesses. The use of survey forms to detect microtrends, identify relationships, and compare insights across individuals proved to be an efficient, flexible, and effective method.

Importantly, participants responded voluntarily and with informed consent. This approach helped avoid rushed or

emotionally driven decision-making, particularly given the ethical nature of the topic.

The first part of the survey was an introductory section in which participants provided their background and status. Anonymity was emphasized to ensure honest participation and maintain the integrity of the data collected.

The questionnaire covered areas including demographics, prior knowledge, and potential barriers to organ donation. Non-donor participants were assessed in Section 3, with questions such as:

- “How familiar are you with the process of organ allocation?” (Very familiar / Somewhat familiar / Not very familiar / Not familiar at all)
- “Race/ethnicity affects the allocation process.”
- “I feel that organs should go to the sickest patient first.”
- “I am concerned that my organs might go to someone who does not deserve them.”
- “Wealth/social status affects prioritization in the waitlist.”
- “Should children be prioritized over adults?” (Yes, because they have a longer life expectancy / No, because medical urgency should be prioritized first / Depends on the situation / Not sure)

These questions aimed to assess participants’ understanding of and ethical views toward the allocation process. Most non-demographic data, including knowledge and attitudes, were evaluated using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). However, not all questions followed this format, allowing for greater flexibility and nuance in participant responses. Data was securely stored in Excel spreadsheets and collected over a two-week period across multiple communities.

Demographic questions were included at the beginning of the survey to identify participant profiles and analyze any correlations between background and attitude. Questions such as

- “Which age group do you belong to?”
- “What gender do you identify as?”

...offered inclusive response options. Other demographic factors included race, religion, education level, and marital status.

Additional questions such as

- “Do you know someone who is on the organ waitlist?”
- “Do you know someone who is/was an organ donor?”

...helped contextualize participant familiarity with the subject, offering further insight into how lived experiences might shape perspectives.

A section was also added for transplant patients. It included questions designed to explore which factors influence their perception of the waitlist system. These questions covered topics such as time spent on the waitlist and the type of organ needed (e.g., kidney, heart, etc.). For instance, kidneys, which are vital organs responsible for filtering blood and waste, are frequently transplanted. When one kidney fails, dialysis is required, significantly impacting quality of life. Fortunately, individuals can survive with one donated kidney, increasing the potential supply of available organs. According to the

European Commission of Public Health, kidneys are the most commonly transplanted organs, followed by livers, lungs, and hearts. While organs like the pancreas and small bowel can also be transplanted, kidneys are uniquely suited for donation by living donors. Hence, this study seeks to uncover more about the ethical and systemic implications of such transplants.

The final section of the survey assessed each participant’s perception of fairness in the organ distribution system. Responses varied based on individual experience, knowledge, and background, further supporting the study’s central research question. Questions in this section included:

- “How transparent is the waitlist process?”
- “Do you think the current waitlist is fair?”
- “What do you think determines a person’s position on the organ waitlist?” (Options: Medical urgency, time on the waitlist, age, social status, predicted survival rate)

Many of these questions encouraged participants to reflect critically and reconsider their assumptions about the system. Other questions explored whether prior organ donors should receive priority if they needed a transplant themselves and whether all patients should be treated equally regardless of background.

The final open-ended question offered participants the chance to freely express their personal insights or concerns, anonymously and without judgment; this allowed deeper exploration of public attitudes toward organ allocation.

## RESULTS AND ANALYSIS

Out of the 150 participants who were sent the survey digitally, 129 people responded (86%), each with diverse backgrounds and demographics. To properly analyze how demographic factors may influence views on organ distribution, participants were divided into three distinct categories: donors, non-donors, and waitlist patients. This data was recorded in a numerical table.

Age/Umur (In years)	Gender/Kelamin	Race & Ethnicity/Ras & Etnis	Religion/Agama
Below 20: 21 (17.3%)	Male/Pria: 47 (38.8%)	South-East Asian/Asia Tenggara: 51 (42.1%)	Buddhist/Buddha: 18 (15.0%)
20-24: 0 (0%)	Female/Wanita: 74 (61.2%)	Chinese/Cina: 65 (53.7%)	Christian/Kristen: 37 (30.5%)
25-34: 10 (8.2%)	Others/Lain: 0 (0%)	Caucasian/Kulit Putih: 1 (0.8%)	Catholic/Katolik: 43 (35.5%)
35-44: 29(24.0%)		African American/Kulit Hitam: 0 (0%)	Islam: 20 (16.5%)
44-60: 56 (46.2%)		Hispanic/Hispanik: 0 (0%)	Hindu: 2 (1.6%)
60+: 5 (4.1%)		Others/Lain: 4 (3.3%)	Kong Hu Chu: 1 (0.8%)
			Others: 0 (0%)
Missing: 0	Missing: 0	Missing: 0	Missing: 0
Marital Status/Status Perkawinan	Education completed/Pendidikan terakhir	Do you know someone who has been in an organ waitlist/Apakah Anda mengenal seseorang yang masuk dalam daftar tunggu organ?	Do you know someone who is or was an organ donor/Apakah Anda mengenal seseorang yang merupakan atau pernah menjadi donor organ?
Single/Belum Menikah: 36 (29.7%)	Middle School/SMP: 14 (11.5%)	Yes: 6 (4.9%)	Yes: 17 (14.1%)
Divorced/Cerai: 0 (0%)	High School/SMA: 13 (10.7%)	No: 116 (95.8%)	No: 112 (92.5%)
Married/Menikah: 79 (65.2%)	College/Universitas: 84 (69.4%)		
	Master degree: 2 (1.6%)		
	PhD: 1 (0.8%)		
Missing: 0	Missing: 1 (0.8%)	Missing: 0	Missing: 0

Table 1: Non-donors

## Demographic Results

Out of the 129 participants who gave consent and completed the form, 121 were non-donors and not part of the waitlist, approximately 93.8%. A majority (46.2%) were aged 44-60, and 61.2% identified as female. Most participants were from Southeast Asia or China, had varying levels of education, and came from diverse personal circumstances. These factors are important in shaping attitudes, especially regarding religious beliefs, educational background, or cultural norms.

Based on the table, 22.7% did not attend college, and 30.5% identified as Christian. However, religion's role in shaping attitudes toward donation may be difficult to determine, as cultural norms or religious rules might interfere, or individuals may choose not to donate or receive organs for personal reasons. For this reason, analyzing the demographic data of donors and waitlisted patients, shown in Table 2, is also important.

Age/Umur (in years)	Gender/Kelamin	Race & Ethnicity/Ras & Etnis	Religion/Agama
Below 20: 2 (25.0%)	Male/Pria: 5 (62.5%)	South-East Asian/Asia Tenggara: 1 (12.5%)	Buddhist/Buddha: 2 (25.0%)
20-24: 0 (0%)	Female/Wanita: 3 (37.5%)	Chinese/Cina: 6 (75.0%)	Christian/Kristen: 1 (12.5%)
25-34: 0 (0%)	Others/Lain: 0 (0%)	Caucasian/Kulit Putih: 0 (0%)	Catholic/Katolik: 5 (62.5%)
35-44: 2 (25.0%)		African American/Kulit Hitam: 1 (12.5%)	Islam: 0 (0%)
44-60: 3 (37.5%)		Hispanic/Hispanik: 0 (0%)	Hindu: 0 (0%)
60+: 1 (12.5%)		Others/Lain: 0 (0%)	Kong Hu Chu: 0 (0%)
			Others: 0 (0%)
Total: 8			
Missing: 0	Missing: 0	Missing: 0	Missing: 0

  

Marital Status/Status Perkawinan	Education completed/Pendidikan terakhir	Do you know someone who has been in an organ donor waitlist/Apakah Anda mengenal seseorang yang masuk dalam daftar tunggu organ?	Do you know someone who is or was an organ donor/Apakah Anda mengenal seseorang yang merupakan atau pernah menjadi donor organ?
Single/Belum Menikah: 3 (37.5%)	Middle School/SMP: 1 (12.5%)	Yes: 3 (37.5%)	Yes: 3 (37.5%)
Divorced/Cerai: 0 (0%)	High School/ SMA: 1 (12.5%)	No: 5 (62.5%)	No: 5 (62.5%)
Married/Menikah: 5 (62.5%)	College/Universitas: 5 (62.5%)		
	Master degree: 1 (12.5%)		
	PhD: 0 (0%)		
Missing: 0	Missing: 0	Missing: 0	Missing: 0

**Table 2: Donors & Patients**

As previously stated, eight participants completed the form as either organ donors or waitlisted patients. They participated voluntarily, based on their personal experiences. According to the data, there were no working individuals between the ages of 20 and 34 on the waitlist. Most data points pertain to either middle-aged, elderly, or individuals under 20.

The majority of this group (62.5%) identified as male, with most describing themselves as Chinese; one participant was African American, and one was Southeast Asian. Most participants followed the Catholic faith, and none identified as Islamic, even though the survey was distributed within an Islamic-majority community. However, we cannot definitively conclude that religious barriers prevent participation in the organ waitlist, since only 129 of 150 individuals responded, insufficient for drawing strong hypotheses.

In terms of marital status, 62.5% were married. Educational background showed that two participants had not pursued education beyond college, and one had not completed high school. It is possible that medical conditions affecting their

organs also limited their ability to maintain a standard learning environment, pushing them onto the waitlist. Finally, only a small percentage of participants personally knew a waitlisted patient or registered organ donor.

## Non-Demographics Results

In the second section of the survey, the focus was on understanding the experiences of waitlisted patients—their medical history, duration on the waitlist, and organ requirements. Seven participants were registered on the organ waitlist, each indicating different durations. To facilitate comparison, the options were categorized into time ranges, followed by a question on the specific organ they needed.

This data is crucial in identifying which organs are most commonly requested and how that might influence allocation policies. The table below summarizes this.

How long have you been in the transplant list/Berapa lama Anda berada dalam daftar tunggu transplantasi?	What type of transplant do you need and why/Jenis transplantasi apa yang Anda butuhkan dan mengapa?	Do you plan on becoming an organ donor? (for people who aren't in the transplant waitlist)/Apakah Anda berencana menjadi donor organ (bagi orang yang tidak termasuk dalam daftar tunggu transplantasi)?
Less than 6 months: 1 (14.2%)	Kidney: 3 (42.8%)	I am already a registered organ donor: 1 (0.81%)
More than 6 months, less than 1 year: 1 (14.2%)	Liver: 1 (14.2%)	I would like to become one but haven't registered: 5 (4.0%)
More than 1 year: 5 (71.4%)	Heart: 1 (14.2%)	I would like to become one but don't know how: 3 (2.4%)
		Still considering: 29 (23.7%)
		I do not plan to become one at all: 83 (68.0%)
Missing: 0 Total: 8	Missing: 2 (28.5%) Total: 8	Missing: 0 Total: 122

Survey responses reveal that many perceive the distribution system as inefficient. As reported by the Health Resources & Services Administration, over 100,000 people—including men, women, and children—are currently on the U.S. transplant waitlist. Of the eight relevant participants in this study, more than 70% had been waiting for over a year.

Kidneys emerged as the most frequently requested organ. Since individuals can live with one kidney, it is more commonly donated, making it a critical point of focus. The final part of this section assesses non-donors, specifically looking at how often donations occur and how transplants move from donor to patient. According to the data, 91% of respondents were unregistered donors, and 6.4% did not know how to register. This suggests that awareness remains low in many communities. Only one of the 122 respondents was a registered donor, highlighting how rare that commitment remains.

## Understanding and knowledge-based questions:

This section highlights the prospective areas from all participants' viewpoints on the current waitlist system. Analysis will be conducted on viewpoints from the donors, non-donors, and patients. This will ensure that opinions can be differentiated, and we can analyze whether these attributes affect responses. Table 3 below shows non-donors.



How familiar are you with the process of organ allocation/Seberapa paham Anda dengan proses perpindahan organ?	Race or ethnicity affects the allocation process/Ras atau etnis mempengaruhi proses perpindahan organ	I feel that organs should go to the sickest patient first/Saya merasa organ harus diberikan kepada pasien yang paling sakit terlebih dahulu
Very familiar: 1 (0.8%)	Strongly Disagree: 9 (7.4%)	Strongly Disagree: 6 (4.9%)
Somewhat familiar: 19 (15.7%)	Disagree: 23 (19%)	Disagree: 7 (5.7%)
Not very familiar: 38 (31.4%)	Neutral: 48 (39.6%)	Neutral: 26 (21.4%)
Not familiar at all: 63 (52.0%)	Agree: 30 (24.7%)	Agree: 49 (40.4%)
Missing: 0	Strongly Agree: 7 (5.7%)	Strongly Agree: 29 (23.9%)
	Missing: 4 (3.3%)	Missing: 4 (3.3%)
I am concerned that my organs might go to someone who does not deserve them/Saya khawatir organ saya akan jatuh ke tangan orang yang tidak berhak mendapatkannya	Wealth or social status affects prioritization in the waitlist/Kekayaan atau status sosial mempengaruhi prioritas dalam daftar tunggu	Should children be prioritized over adults/Haruskah anak-anak diprioritaskan dibandingkan orang dewasa?
Strongly Disagree: 5 (4.1%)	Strongly Disagree: 23 (19.0%)	Yes, because they have a longer life expectancy: 27 (22.3%)
Disagree: 15 (12.3%)	Disagree: 24 (19.8%)	No, because medical urgency should be prioritized first: 24 (19.8%)
Neutral: 36 (29.7%)	Neutral: 28 (23.1%)	Not sure: 14 (11.5%)
Agree: 40 (33.0%)	Agree: 32 (26.4%)	Depends on the situation: 52 (42.9%)
Strongly Agree: 18 (14.8%)	Strongly Agree: 10 (8.2%)	Missing: 4 (3.3%)
Missing: 7 (5.7%)	Missing: 4 (3.3%)	

Table 3: Non-donors

Results show that 52% of non-donors were unfamiliar with the organ allocation process. Follow-up questions were structured using a five-point Likert scale, allowing for clearer interpretation of participants' ethical beliefs and levels of understanding. A noticeable trend was that many chose neutral or "not sure" responses, suggesting a lack of sufficient knowledge to form strong opinions. This underlines the importance of including donor and patient responses for more balanced insights.

How familiar are you with the process of organ allocation/Seberapa paham Anda dengan proses perpindahan organ?	Race or ethnicity affects the allocation process/Ras atau etnis mempengaruhi proses perpindahan organ	I feel that organs should go to the sickest patient first/Saya merasa organ harus diberikan kepada pasien yang paling sakit terlebih dahulu
Very familiar: 2 (25.0%)	Strongly Disagree: 1 (12.5%)	Strongly Disagree: 0 (0%)
Somewhat familiar: 3 (37.5%)	Disagree: 1 (12.5%)	Disagree: 0 (0%)
Not very familiar: 2 (50%)	Neutral: 3 (37.5%)	Neutral: 2 (25%)
Not familiar at all: 1 (12.5%)	Agree: 1 (12.5%)	Agree: 2 (25%)
Missing: 0	Strongly Agree: 2 (25%)	Strongly Agree: 4 (50%)
	Missing: 0	Missing: 0
I am concerned that my organs might go to someone who does not deserve them/Saya khawatir organ saya akan jatuh ke tangan orang yang tidak berhak mendapatkannya	Wealth or social status affects prioritization in the waitlist/Kekayaan atau status sosial mempengaruhi prioritas dalam daftar tunggu	Should children be prioritized over adults/Haruskah anak-anak diprioritaskan dibandingkan orang dewasa?
Strongly Disagree: 0 (0%)	Strongly Disagree: 1 (12.5%)	Yes, because they have a longer life expectancy: 2 (25%)
Disagree: 0 (0%)	Disagree: 3 (37.5%)	No, because medical urgency should be prioritized first: 3 (37.5%)
Neutral: 2 (25%)	Neutral: 1 (12.5%)	Not sure: 1 (12.5%)
Agree: 4 (50%)	Agree: 0 (0%)	Depends on the situation: 2 (25%)
Strongly Agree: 2 (25%)	Strongly Agree: 3 (37.5%)	Missing: 0
Missing: 0	Missing: 0	

Table 4: Donors &amp; Patients

All eight participants in this group responded, offering a stronger basis for comparison. As expected, most were familiar with the organ allocation process, likely due to their personal experience. Regarding specific ethical beliefs, there were mixed views on the influence of race in allocation. However, wealth and social status were seen as significant factors, with 37.5% of participants choosing the highest level of agreement on the Likert scale.

Furthermore, 75% agreed that organs should go to the sickest patient first. Many also expressed concern about where their donated organ would go, indicating a desire for transparency. Overall, responses varied widely, revealing that even among patients and donors, opinions are not uniform.

## Perceptions of Fairness

The last section of the survey focuses on criticisms towards the waitlist, if they have any. It allows the participants to pause and think about what to answer under their own knowledge of the waitlist system. These questions are more 'ethical' and 'controversial', which allows for observation regarding the public's perspectives and transparency of the system. Hence, this observation is aimed at areas of improvement towards the waitlist, which can also address potential misunderstandings.

How transparent is the waitlist process/Seberapa transparan proses daftar tunggu?	Do you think the current waitlist is fair/Apakah menurut Anda daftar tunggu saat ini adil?	What do you think determines a person's position on the organ waitlist? (Select the most important factor)/Menurut Anda apa yang menentukan posisi seseorang dalam daftar tunggu organ? (Pilih faktor yang paling penting)
Very transparent: 8 (6.6%)	Yes, it is fair and prioritizes urgency: 2 (1.6%)	Medical urgency: 68 (56.1%)
Somewhat transparent: 23 (19%)	Somewhat fair, but improvements are needed: 27 (22.3%)	Time spent in the waitlist: 10 (8.2%)
Not very transparent: 51 (42.1%)	No, it is not fair: 10 (8.2%)	Age: 5 (4.1%)
Not transparent at all: 16 (13.2%)	Don't know: 71 (58.6%)	Social status: 9 (7.4%)
Missing: 23 (19.0%)	Missing: 11 (9.0%)	Greater predicted survival: 24 (19.8%)
		Missing: 5 (4.1%)
What would make you more confident in the organ waitlist system? (Select the most important improvement)/Apa yang membuat Anda lebih percaya diri dengan sistem daftar tunggu organ? (Pilih peningkatan yang paling penting)	Do you think being a registered organ donor should give someone priority on the waitlist if ever they need a transplant/Apakah menurut Anda menjadi donor organ terdaftar harus memberikan prioritas pada seseorang dalam daftar tunggu jika mereka membutuhkan transplantasi?	How do you feel about the idea of transplanting animal organs to reduce waitlist time (xenotransplantation)?/Bagaimana perasaan Anda tentang gagasan transplantasi organ hewan untuk mengurangi waktu daftar tunggu (xenotransplantasi)
Greater public awareness of how it works: 25 (20.6%)	Yes, donors should get priority: 32 (26.4%)	Strongly support: 9 (7.4%)
Better oversight to ensure fairness: 26 (21.4%)	No, everyone should be treated equally: 51 (42.1%)	Somewhat support: 13 (10.7%)
More transparency in donors and recipients: 28 (23.1%)	Not sure: 31 (25.6%)	Neutral: 38 (31.4%)
Improved efficiency in the matching system: 27 (22.3%)		Somewhat oppose: 29 (23.9%)
Not sure: 5 (4.1%)	Missing: 7 (5.7%)	Strongly oppose: 26 (21.4%)
Missing: 10 (8.2%)		Missing: 6 (4.9%)

Table 5: Non-donors

How transparent is the waitlist process/Seberapa transparan proses daftar tunggu?	Do you think the current waitlist is fair/Apakah menurut Anda daftar tunggu saat ini adil?	What do you think determines a person's position on the organ waitlist? (Select the most important factor)/Menurut Anda apa yang menentukan posisi seseorang dalam daftar tunggu organ? (Pilih faktor yang paling penting)
Very transparent: 0 (0%)	Yes, it is fair and prioritizes urgency: 0 (0%)	Medical urgency: 3 (37.5%)
Somewhat transparent: 2 (25%)	Somewhat fair, but improvements are needed: 3 (37.5%)	Time spent in the waitlist: 1 (12.5%)
Not very transparent: 3 (37.5%)	No, it is not fair: 3 (37.5%)	Age: 0 (0%)
Not transparent at all: 3 (37.5%)	Don't know: 2 (25.0%)	Social status: 1 (12.5%)
Missing: 0 (0%)	Missing: 0 (0%)	Greater predicted survival: 3 (37.5%)
		Missing: 0 (0%)
What would make you more confident in the organ waitlist system? (Select the most important improvement)/Apa yang membuat Anda lebih percaya diri dengan sistem daftar tunggu organ? (Pilih peningkatan yang paling penting)	Do you think being a registered organ donor should give someone priority on the waitlist if ever they need a transplant/Apakah menurut Anda menjadi donor organ terdaftar harus memberikan prioritas pada seseorang dalam daftar tunggu jika mereka membutuhkan transplantasi?	How do you feel about the idea of transplanting animal organs to reduce waitlist time (xenotransplantation)?/Bagaimana perasaan Anda tentang gagasan transplantasi organ hewan untuk mengurangi waktu daftar tunggu (xenotransplantasi)
Greater public awareness of how it works: 1 (12.5%)	Yes, donors should get priority: 2 (25.0%)	Strongly support: 1 (12.5%)
Better oversight to ensure fairness: 3 (37.5%)	No, everyone should be treated equally: 5 (62.5%)	Somewhat support: 1 (12.5%)
More transparency in donors and recipients: 1 (12.5%)	Not sure: 1 (12.5%)	Neutral: 3 (37.5%)
Improved efficiency in the matching system: 2 (25.0%)		Somewhat oppose: 0 (0%)
Not sure: 1 (12.5%)	Missing: 0 (0%)	Strongly oppose: 3 (37.5%)
Missing: 0 (0%)		Missing: 0 (0%)

Table 6: Donors &amp; Patients

A consistent theme across responses from patients was confusion or unfamiliarity with the allocation process; 75% reported they did not fully understand how the system works. No responses indicated full confidence in the equity of the waitlist. This uncertainty, even among those directly involved, highlights a major challenge for the national organ distribution system.

Many participants, across all categories, called for greater transparency between donors, recipients, and system administrators. Both groups expressed concerns about fairness and a lack of visibility into the criteria used for organ allocation.

In total, over 50% of the 129 respondents lacked awareness about how the waitlist system functions—an alarming figure,

considering how directly the issue affects human lives. These findings point to the urgent need for public education, clearer policies, and better communication across the entire transplant system.

### DISCUSSION AND FUTURE DIRECTION

Combining all results to support the hypothesis that demographics affect attitudes is difficult to conclude definitively. Each participant came with different determinants and belief systems, which makes it difficult to isolate demographic influence. However, the study still offers a fresh perspective.

The demographic data was collected and analyzed. Although 93% of participants were neither donors nor directly involved in the waitlist system and potentially unaware of its complexities, the majority still responded truthfully. Prior to data collection, it was anticipated that demographics would significantly influence participant behavior. However, the results indicate that factors such as personal knowledge and lived experience had a greater impact than demographics alone. While some trends were still noticeable, such as limited religious representation among registered donors or a particular age group being more affected by organ failure, these were not consistent enough to form a conclusive trend.

A relevant study titled “Attitudes toward Organ Donation and Donor Behavior: A Review of the International Literature” (Wakefield, C. E.) examined donor perspectives, willingness to donate, and behavior regarding deceased organ donation. However, many of its findings did not align with the main focus of this paper, which centers on systemic inefficiencies within organ allocation. Thousands of individuals die each year not only due to donor shortages but also due to misconceptions and a lack of trust in the system. Nearly half of the surveyed individuals held inaccurate beliefs about how organ allocation works, and only a small fraction had any prior background on the subject. These results present a strong opportunity to improve donor rates through education led by medical providers and institutions.

The results from this study also indicate that donors and waitlisted patients prioritize equity and urgency in the allocation process. In contrast, non-donors tend to focus on transparency concerns or raise ethical questions surrounding demographics. This division highlights the urgent need for enhanced public education and thoughtful policy reforms to restore trust in the transplant system. By correcting misconceptions, increasing transparency, and making access more equitable, the healthcare system could significantly improve public confidence and increase donor registrations. Reforms that reduce the impact of socioeconomic disparities would further strengthen perceptions of fairness.

It is important to acknowledge that this study is not yet conclusive. Due to the small sample size, definitive trends could not be fully established. The study also could not fully isolate demographic influence as intended in the research question. However, attitudes remain closely tied to demographic factors, and some microtrends do emerge. To build on this, future

research could employ a more statistically rigorous approach, such as using ANOVA tables, standard deviation analysis, and mean comparisons, to analyze demographic impact more accurately.

Ultimately, this research lays the groundwork for understanding how attitudes vary among different types of participants. While it only scratches the surface, it opens the door to deeper inquiry and future investigation into how to make organ donation systems more just, inclusive, and trusted.

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